

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-13. (Cancelled)

14. (Currently Amended) A pen-based computing system for estimating the orientation of a segment of digital ink, the system including a pen-based computing pen to input digital ink, and a processor adapted to estimate the orientation of ~~a said segment of digital ink by~~ measuring the azimuth of the pen at a sampling rate during writer generation of ~~the segment of a plurality of digital ink training text characters,~~ determining a mean azimuth for all of the sampled points of said training text characters, measuring the azimuth of the pen at a sampling rate during writer generation of said segment, and estimating the orientation of the segment of digital ink by subtracting the determined mean azimuth from each measured azimuth of each sampled point of said segment.

15-16. (Cancelled)

17. (Previously Presented) A system as claimed in claim 14, wherein the processor is further adapted to use the estimated orientation of the segment of digital ink in a digital ink line orientation normalization technique.

18. (Previously Presented) A system as claimed in claim 14, wherein the processor is further adapted to use a single, fixed orientation estimation for a line of digital ink.

19. (Previously Presented) A system as claimed in claim 14, wherein the processor is further adapted to use an orientation estimation that varies across a line of digital ink.

20. (Previously Presented) A system as claimed in claim 14, wherein the processor is further adapted to normalize the estimated orientation to be within the range of 0° to 360°.

21. (Previously Presented) A system as claimed in claim 14, wherein the segment of digital ink is more than one character of digital ink.

22. (Previously Presented) A system as claimed in claim 14, wherein the segment of digital ink is a line segment.

23. (Previously Presented) A system as claimed in claim 22, wherein the processor is further adapted to perform line segmentation by measuring a change in azimuth value.

24. (Previously Presented) A system as claimed in claim 14, wherein the processor is further adapted to use a writer independent handwriting model to estimate the orientation.

25. (Previously Presented) A system as claimed in claim 14, wherein the processor is further adapted to use a writer dependent handwriting model trained using sample digital ink input by the writer to estimate the orientation.

26. (Previously Presented) A system as claimed in claim 25, wherein the writer dependent handwriting model is trained using sample digital ink input by the writer using a consistent baseline.

27. (Previously Presented) A system as claimed in claim 25, wherein the writer dependent handwriting model is trained using arbitrary sample digital ink input by the writer.